APPENDIX G

SI Conversion Units

In view of the present accepted practice in this country for building technology, common U. S. units of measurement have been used throughout this publication. In recognition of the Metric Conversion Act of 1975, P. L. 94-168, appropriate conversion factors have been provided in the table below. The reader interested in making further use of the coherent systems of SI units is referred to: The Metric Guide for Federal Construction, First Edition as Published by the National Institute of Building Sciences.

Table of Conversion Factors to Metric (SI) Units

Physical Quality	To Convert From	To	Multiply By
Length	inch	meter	$2.54^{*} \times 10^{-2}$
	foot	m	$3.048^{*} \times 10^{2}$
Area	$inch^2$	m^2	$6.4516^{*} \times 10^{-4}$
	$foot^2$	m^2	$.290 \times 10^{2}$
Volume	$inch^3$	m^3	1.639×10^{-5}
	$foot^3$	m^3	2.832×10^{-2}
Temperature	Fahrenheit	Celsius	$t_c = (F-32)/1.8$
Temperature difference	Fahrenheit	Kelvin	$K = (^{t}F)/1.8$
Pressure	inch Hg (60F)	$newton/m^2$	3.377×10^{3}
Mass	lbm	kg	4.536×10^{-1}
Mass/unit area	lbm/ft^2	kg/m^2	4.882
Moisture content rate	lbm/ft^2 week	kg/m^2s	8.073×10^{-6}
Density	lbm/ft^3	kg/m^3	1.602×10^{1}
Thermal conductivity	(Btu x in>)/(hr x Ft^2 x F)	$\frac{W}{mK}$	1.422×10^{-1}
U-value	Btu/hr x ft x F	$\frac{W}{m^2K}$	5.678
Thermal resistance	(hr x ft x F)/Btu	$m^2 \times K/W$	1/761 x 10

*Exact value; others are rounded to the minimum number of signature units.